

REMARKS

By the present Amendment, Applicants have amended claim 17 to more appropriately define the invention. The Amendment is fully supported by the specification. See, e.g., specification, p. 16, ll. 5-11. Claims 17-19 are pending.

In the Office Action, the Examiner rejected claims 17-18 under 35 U.S.C. § 102(b) as anticipated by Tateyama et al. (U.S. Patent No. 5,965,200); rejected claims 17-18 under 35 U.S.C. § 102(b) as anticipated by JP 04-181143 (JP '143); and rejected claim 19 under 35 U.S.C. § 103(a) as unpatentable over Tateyama et al. in view of Tanaka et al. (U.S. Patent No. 6,692,165). Applicants respectfully traverse these rejections.

To anticipate Applicants' claimed invention under 35 U.S.C. § 102, each and every element of the claim in issue must be found, "either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. § 2131, 8th ed., Rev. of May 2004.

The rejection of claims 17-18 under 35 U.S.C. § 102(b) as anticipated by Tateyama et al. is improper, because Tateyama et al. fails to teach each and every element of these claims.

For example, claim 17 recites, inter alia, "a dispenser nozzle arranged to face a target substrate to be processed so as to supply a chemical solution that includes a solid component and a solvent to said target substrate; [and] a suction nozzle arranged

to face said target substrate for selectively sucking a solvent vapor on a liquid film formed on said target substrate by the supply of a chemical solution from said dispenser nozzle.”

In contrast, Tateyama et al. only teaches a developing apparatus 20 comprising a developing solution supply nozzle 22 and a suction nozzle 23. See Tateyama et al., col. 5, ll. 32-39. The Examiner considered suction nozzle 23 as corresponding to Applicants’ claimed suction nozzle. However, Tateyama et al.’s suction nozzle 23 only serves “as a processing liquid recovering means for recovering the processing liquid on the substrate G under a suction force.” Id., col. 5, ll. 39-41. Tateyama et al. does not teach that suction nozzle 23 can “selectively suck[] a solvent vapor,” as required by claim 17.

Therefore, Tateyama et al. fails to teach at least “a suction nozzle arranged to face said target substrate for selectively sucking a solvent vapor on a liquid film formed on said target substrate by the supply of a chemical solution from said dispenser nozzle,” as recited in claim 17. Claim 17 is allowable over Tateyama et al. Claim 18 depends from claim 17 and is therefore also allowable over Tateyama et al.

The rejection of claims 17-18 under 35 U.S.C. § 102(b) as anticipated by JP ‘143 is also improper, because JP ‘143 fails to teach each and every element of these claims. JP ‘143 only teaches a specimen recovering device including a dripping nozzle 5, a vapor nozzle 3, and a suction nozzle 2. See CONSTITUTION of English translation of JP ‘143. The Examiner considered the suction nozzle 2 of JP ‘143 as corresponding to Applicants’ claimed suction nozzle. Applicants disagree. Suction nozzle 2 of JP ‘143 only serves to “have reaction solution sucked,” see Id., and does not “selectively suck[]

a solvent vapor,” as required by claim 17. Therefore, JP ‘143 fails to teach at least “a suction nozzle arranged to face said target substrate for selectively sucking a solvent vapor on a liquid film formed on said target substrate by the supply of a chemical solution from said dispenser nozzle,” as recited in claim 17. Claim 17 and its dependent claim 18 are thus allowable over JP ‘143.

Finally, the rejection of claim 19 under 35 U.S.C. § 103(a) is also improper, because a prima facie case of obviousness has not been established by the Examiner.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. M.P.E.P. § 2143, 8th ed., Revision of May 2004.

As discussed above, Tateyama et al. fails to teach or suggest at least “a suction nozzle arranged to face said target substrate for selectively sucking a solvent vapor on a liquid film formed on said target substrate by the supply of a chemical solution from said dispenser nozzle,” as recited in claim 17, from which claim 19 depends.

Tanaka et al. fails to cure the deficiencies of Tateyama et al. Tanaka et al. discloses a substrate processing apparatus including a rinse discharge nozzle 41. The Examiner seemed to have considered Tanaka et al.’s nozzle 41 as corresponding to

Applicants' claimed suction nozzle. However, this is incorrect. Referring to Tanaka et al., the rinse discharge nozzle 41 includes a nozzle body part 47 formed with a slit discharge port 49 and a slit suction port 51. See Tanaka et al., col. 12, ll. 24-37. Moreover, "slit discharge port 49 communicates with the pipe 72, for supplying the pure water guided through the pipe 72 to the substrate W as the rinse. . . . This slit suction port 51 communicates with the pipe 45, for sucking and recovering the pure water supplied onto the substrate W through the pipe 45." Tanaka et al., col. 12, ll. 30-39. Tanaka et al. does not teach that nozzle 41 "selectively suck[s] a solvent vapor," as recited in claim 17 and required by dependent claim 19.

Therefore, Tateyama et al. and Tanaka et al., taken alone or in combination, fail to teach or suggest at least "a suction nozzle arranged to face said target substrate for selectively sucking a solvent vapor on a liquid film formed on said target substrate by the supply of a chemical solution from said dispenser nozzle," as recited in claim 17, from which claim 19 depends. Claim 19 is therefore allowable over Tateyama et al. and Tanaka et al.


In view of the foregoing, Applicants respectfully request reconsideration of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account no. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

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By: 

Qingyu Yin
Ltd. Rec. No.: L0222